



IEEJ e-NEWSLETTER

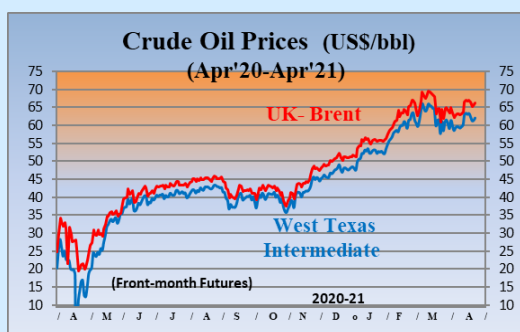
No. 207

(Based on Japanese No. 211)

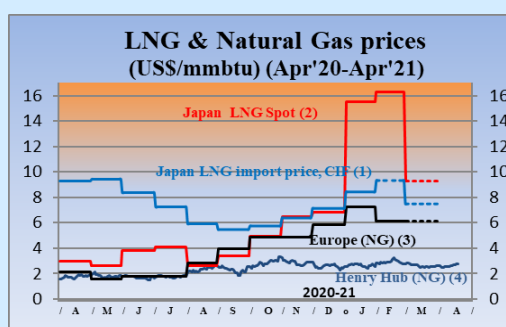
Published: April 23, 2021

The Institute of Energy Economics, Japan

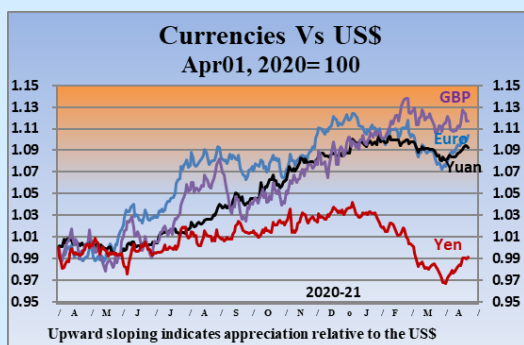
(As of April 23, 2021)



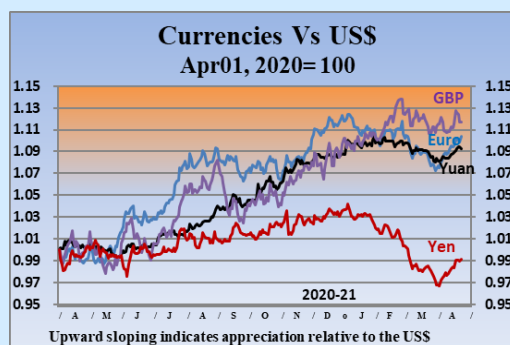
Sources:
 (1) DOE-EIA
 (2) Investing.com



Sources:
 (1) Ministry of Finance "Japan Trade Statistics"
 (2) Ministry of Economy, Trade and Industry (arrival month basis)
 (3) Estimated by World Bank (Netherlands Title Transfer Facility)
 (4) DOE-EIA, NYMEX (Front-month Futures)



Source: x-rates.com



Sources:
 (1) Finance. Yahoo.com
 (2) Investing.com

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Summary

【World Monitoring】

1. US: US Oil Industry Faces Strong Decarbonization Pressure

More US oil companies are pledging aggressive carbon emissions reduction including carbon neutral in the US oil industry, which has been cautious about reducing emissions. Behind this lies the pressure of financial markets and NGOs that have urged the European oil industry to take climate actions.

2. EU: National Grid Reshapes Its Energy Infrastructure

The UK's National Grid has strengthened its electricity assets by acquiring an electricity distributor and investing in transmission and distribution, and has begun to lay out plans for building hydrogen infrastructure. It is reshaping its supply infrastructure in preparation for decarbonization.

3. China: Much-Awaited New 5-Year Plan and Long-Term Target Outline

The Fourteenth Five-Year Plan for National Economic and Social Development and the Long-Range Objectives through the Year 2035 were adopted. The targets set include a 13.5% reduction in energy consumption per unit GDP and an 18% reduction in CO₂ emissions per unit GDP in 2025 compared to 2020.

4. ME: US' Return to the Iran Nuclear Deal Proving Difficult

The Biden administration is maintaining almost all the sanctions imposed by the Trump administration to urge Iran to return to the nuclear deal, while Iran is insisting that the US should first lift the sanctions, resulting in a stalemate.

5. Russia: Deepening Confrontation with the West and the New LNG Strategy

Amid intensifying confrontation with the West after the start of the Biden administration, Russia published its new LNG strategy. Attention must be paid to the mutual impact between changes in the dynamics of international relations and Russia's energy strategy.



1. US: US Oil Industry Faces Strong Decarbonization Pressure

Yoshikazu Kobayashi, Senior Economist
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Despite more and more energy companies pledging the net-zero goal, US oil companies have largely remained cautious about reducing their own emissions. However, with the serious deterioration of business caused by the Covid-induced collapse in demand and the inauguration of the climate-conscious Biden administration, the US oil industry is facing growing pressure to turn around its conventional, oil- and natural gas-centered business strategy and deploy initiatives that focus on reducing GHG emissions.

CO₂ emissions from the oil industry are usually categorized into three groups depending on the stage at which the emissions are generated: those generated at oil and natural gas production sites are categorized as Scope 1, those from the production of externally-purchased electricity and heat energy used for producing oil and natural gas as Scope 2, and those arising from the consumption of produced oil and natural gas as Scope 3. Occidental is the only major US oil company that has pledged to make emissions in all three scopes net-zero. The company plans to achieve net-zero for Scopes 1 and 2 by 2040 and for all emissions including Scope 3 by 2050 by combining direct air capture (DAC) with CCS-EOR technology, which is already in use. Aside from Occidental, ConocoPhillips has announced a target to go carbon neutral for Scopes 1 and 2 by 2050 by ending flaring, conserving energy, and CCUS. Meanwhile, among the so-called majors, Chevron has committed to aiming for net-zero in Scopes 1 and 2 but has set no clear target year. ExxonMobil has not released any specific reduction targets.

In recent years, US oil companies have faced various external and internal efforts through diverse approaches and channels urging them to change their management policies. For ExxonMobil, hedge funds have acquired a stake in the company and attempted to install their own candidates on the board in order to increase investment in renewable energy. An NGO has filed a case against Chevron with the Fair Trade Commission claiming that the company's climate actions are "green-washing (meaning their climate actions contain misleading information)". Even Occidental and ConocoPhillips, which have set the highest emission reduction targets in the US oil industry, are facing motions by some shareholders demanding that the formulation of detailed emission reduction plans be added to the annual shareholder meeting agenda. The two companies saw this proposal as excessive interference in the management and applied for permission from the Security Exchange Council to dismiss it, but the application has been rejected.

The pressure of financial markets and NGOs that powerfully urged the European oil industry to adopt decarbonization measures has at last begun to affect the US oil industry. The recent rise in oil prices has given the oil industry an opportunity to stress the importance and profitability of the conventional oil and natural gas business, but as shown by the SEC's decision, even government bodies are taking a more climate-focused stance in the US. Pressure to decarbonize the oil industry may be a lasting phenomenon.



2. EU: National Grid Reshapes Its Energy Infrastructure

Ichiro KUTANI, Senior Research Fellow, Manager
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On March 18, it was reported in the media that UK electricity transmitter and high-pressure gas pipeline operator National Grid will purchase Western Power Distribution, the largest electricity distribution operator in the UK currently owned by a US company. The distribution business in four supply areas in the Midlands, South West, and Wales in the UK will be purchased, covering 7.9 million customer contracts. The acquisition will raise the share of electricity in National Grid's total assets from 60% to 70%.

The UK is working to expand the use of renewable energy in the country, and to support this endeavor, regulator Ofgem has given permission to invest 40 billion pounds (roughly 6 trillion yen at 150 yen to the pound) in electricity transmission and distribution from 2021 through 2026. Like others, National Grid's business has also been hit by the pandemic-induced slump in electricity demand, but the company plans to invest about 10 billion pounds (1.5 trillion yen) on its network in the next five years. The company is actively strengthening its electricity assets heading toward 2050 when carbon neutrality is to be reached.

National Grid has also announced it will look into the possibility of developing a hydrogen backbone. The UK aims to build 5 GW (150 tonne/h) of supply capacity for low-carbon hydrogen (meaning both blue and green hydrogen) by 2030. The country also aims to develop CCS at two locations by 2025 and four locations in total by 2030. The hydrogen backbone will become a 2,000-km hydrogen pipeline network that joins together these hydrogen supply sources, multiple hydrogen demand centers (industrial areas), and CO₂ storage locations by 2030. The plan envisages converting existing natural gas infrastructure into hydrogen infrastructure and the company will consider the steps necessary for converting the infrastructure by 2030. Looking even further ahead, the company is considering connecting the backbone with hydrogen infrastructure on the European continent.

Meanwhile, National Grid is reportedly planning to sell the majority of its high-pressure pipeline assets within this year. Reaching carbon neutrality requires reducing the direct combustion of natural gas in phases, and the company may be reshuffling its assets with a view to future decarbonization. Alternatively, the sale might be intended to raise funds for strengthening its electricity infrastructure and building hydrogen infrastructure.

On the European continent, GET H2, a consortium of seven private enterprises, is working on a plan to build cross-border hydrogen infrastructure between northwestern Germany and the Netherlands between 2024 and 2030. The infrastructure network will link the production, transport, storage and industrial consumption of green hydrogen, and thus National Grid's plan to connect the UK with continental Europe via a hydrogen pipeline is not a mere dream.

The reshaping of supply infrastructure is essential for achieving carbon neutrality. The relationship between growth in demand and expansion of infrastructure contains many uncertainties and difficulties, which is a typical "chicken or egg" problem. It is fascinating to see how this issue will be addressed.



3. China: Much-Awaited New 5-Year Plan and Long-Term Target Outline

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The Fourteenth Five-Year Plan for National Economic and Social Development and the Long-Range Objectives through the Year 2035 (“the Overall Plan”) was adopted at the fourth session of the 13th National People’s Congress that closed on March 11 and was released the next day. Guidelines setting the basic policies and major goals of the Plan had already been announced last November as a “Proposal” of the CPC (Communist Party of China) Central Committee. With the adoption and release of the Overall Plan, the focus is now on how far the Plan can be implemented and achieved.

The Overall Plan set the target of raising per-capita GDP (\$10,500 in 2020) to that of medium-level developed countries by 2035. To achieve this target, the Overall Plan stated that economic growth will be maintained “within a reasonable range” for the next five years but that numerical growth rate targets will be set for each year based on the circumstances at the time, due to the considerable uncertainties related to Covid-19 and the global economic slowdown. Even though President Xi Jinping stated while explaining the Proposal that doubling GDP by 2035 (annual economic growth rate of 4.3%) is entirely possible and this year’s growth rate is generally expected to be around 8% (8.1% according to the March 18 announcement by the UN Trade and Development Board), the numerical target was set to only 6% or higher to pursue stable growth. This suggests that the government estimates the annual growth rate over the five years will be around 6%. Meanwhile, the Overall Plan sets independence and self-improvement in science and technology as the strategic pillar of national development, mindful of the US technology blockade against China becoming the norm, and sets explicit targets to boost total R&D investment by at least 7% per annum and raise the share of basic research investment in all R&D investment from 6.2% in 2020 to at least 8% in 2025.

In the areas of decarbonization and energy, the Overall Plan states that measures will be further strengthened to reach net-zero GHG emissions by 2060. As the long-term target for 2035, China will reach peak carbon emissions by 2030 and reduce emissions thereafter. To achieve this, the Overall Plan sets binding targets to reduce energy consumption per unit GDP by 13.5% and CO₂ emissions per unit GDP by 18% from 2020 to 2025. The Overall Plan also sets a target of increasing the share of non-fossil fuels in primary energy to 20% in 2025 (from 15.9% in 2020) in order to build a clean, low-carbon, safe, and highly-efficient energy system and improve energy security. Wind power and solar PV will be expanded significantly and the construction of a hydropower base in southwest China will be accelerated. Nuclear power will be developed safely and moderately in coastal areas, reaching 70 GW in operation by 2025 (currently 51.03 GW in operation as of end-March). Meanwhile, there was no mention of the scale of nuclear new builds during the five years or of nuclear development in inland areas, over which public opinion is divided. Furthermore, no targets were set with respect to CO₂ emission volume or total energy consumption as of the final year of the five-year plan.

Going forward, the Overall Plan will be broken down into feasible levels by developing area-specific plans, regional plans, and specific measures, which will be implemented accordingly. Attention will focus on the extent to which the total amount of energy consumption and CO₂ emissions will be regulated and allocated to each region, and when the national market for carbon emissions credit trading will open and how the target sectors will expand.



4. ME: US' Return to the Iran Nuclear Deal Proving Difficult

Sachi SAKANASHI, Senior Research Fellow
Assistant Director, JIME Center

Two months since the inauguration of the Biden administration, it is becoming clearer every day that the US' return to the Iran nuclear deal (JCPOA) will not be easy. President Trump unilaterally left the JCPOA after slamming it as the “worst deal ever,” and aimed to sign a “new deal” with Iran including issues related to missiles and Iran’s activities in the region. It is now becoming clear that the Biden administration has the same aim, the only difference between the two being the approach taken.

The Trump administration urged Iran to accept the US' demands (including abandoning uranium enrichment) by applying “maximum pressure.” Meanwhile, the Biden administration is hoping to sign a new deal “through dialogue,” while the maximum sanctions against Iran imposed during the Trump presidency remain mostly intact. The sanctions are leverage that the administration cannot afford to give up ahead of entering new talks with Iran, and are being used to pressure Iran to return to the JCPOA first.

Iran, meanwhile, announced the suspension of the Additional Protocol of the Nuclear Non-proliferation Treaty on February 23. This means that the IAEA can no longer exercise sufficient surveillance over Iran’s nuclear-related activities. IAEA Director General Rafael Mariano Grossi urgently visited Teheran and concluded a deal to continue necessary supervision for another three months. In response to this development, the US is requesting unofficial talks with Iran, but Iran keeps insisting that the US should lift the sanctions first, resulting in a stalemate. Iran is due to hold a presidential election on June 18. If the voting date arrives without sufficient sanctions lifted, it would hand an advantage to hardline conservatives, who would claim that only they can break the stalemate.

Amid these circumstances, Chinese foreign minister Wang Yi visited Iran and signed the Iran-China 25-Year Cooperation Program with the country. The Program purportedly includes plans for China to make enormous investments in Iran’s energy and infrastructure sectors while continuing to import certain amounts of Iranian oil. China seems set to continue to boost its presence in the Persian Gulf region by strengthening its cooperation with Iran as well.

In Yemen, meanwhile, a series of missile and drone attacks were launched on Saudi Arabia, apparently by the Houthis. On March 22, Saudi Arabia put forward a new peace plan to end the Yemen crisis. Israel held its fourth general election in two years on March 23, which ended yet again without a clear winner, which would make the talks on a coalition difficult. In Libya in North Africa, where the country has been divided, the House of Representatives, which is the legislative arm, approved the new cabinet led by Prime Minister Abdul Hamid al-Dbeibah on March 10, and a unified provisional government was launched. The new government will govern until the presidential and parliamentary elections scheduled for December 24, to work on restoring public safety and resolving the division of the country.



5. Russia: Deepening Confrontation with the West and the New LNG Strategy

Shoichi ITOH, Manager, Senior Analyst
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On March 2, the EU announced new sanctions on four leaders of the National Guard of Russia, an internal military force that reports directly to the Russian president, and Prosecutor-General Krasnov for their roles in the arrest of Russian anti-government leader Alexei Navalny and the crackdown on the protests demanding his freedom. The sanctioned parties had their assets in the EU frozen and were banned from traveling to the EU. On the same day, the US concluded that the Russian government was involved in the attempted murder of Mr. Navalny by poisoning in August 2020, and imposed sanctions including freezing the US assets of seven senior Russian government officials including Alexander Bortnikov, Director of the Federal Security Service (FSB), and an export ban on 14 organizations; these were the first such sanctions under the Biden administration. Furthermore, on March 16, the US Justice Department released a report stating that, at the US presidential election in November 2020, Russian government-affiliated parties attempted, but failed, to interfere in US internal politics to support former President Trump under the instructions of President Putin. On March 17, asked in a TV interview whether he thought Mr. Putin was a “killer” over the attempted murder of Mr. Navalny, President Biden responded, “I do.” The news was reported worldwide. The Russian side retorted that the claim was utterly unfounded and immediately recalled its ambassador from the US.

Under these circumstances, the world is watching the ties between Russia and China grow stronger. As US-China tensions heighten, with the Biden administration viewing China as the greatest threat to national security, on March 23, Russian foreign minister Sergei Lavrov met with his Chinese counterpart Wang Yi in the Guangxi Zhuang Autonomous Region and released a joint statement fiercely rejecting the West’s demands on human rights and other issues. Russian domestic media reported that Russia and China have agreed to halt the expansion of the US influence in Europe and Asia.

On March 16, the Russian government approved a long-term program for developing its LNG production. The program provides the outlook for Russia’s production and export of LNG, taking into account the Energy Strategy of Russia for the period up to 2035 adopted in June 2020 and the outlook for the international natural gas market from Russia’s perspective. The program sets two scenarios regarding the increase in global LNG demand for 2030, namely the high-level scenario (718 million tonnes/year) and the low-level scenario (421 million tonnes/year), and estimates the annual production of major LNG exporters at 70–90 million tonnes for Australia, 70–140 million tonnes for Qatar, 100–300 million tonnes for the US and 140 million tonnes for Russia. The program also estimates the total cost for LNG export (including production and transport) to the Asia Pacific region including China and India, where particularly large growth in gas demand is expected, at roughly \$3.7–7/million (M) btu for Russia, \$2.8–11/Mbtu for Australia, and \$7–10/Mbtu for the US.

As the conflict between Russia and the West intensifies, attention must also be paid to how the changing dynamics of international relations may impact Russia’s LNG export policy, and conversely, the possible impact of Russia’s LNG strategy on the international energy situation.



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IEEJ : April 2021 ©IEEJ 2021